

# **WILDLAND-URBAN INTERFACE COMMUNITIES-AT-RISK PROGRAM**

## **Final Mitigation Plan Report Lower Snake River District Mountain Home Assessment Area**



Work Assignment No.: BLM4-73  
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**FINAL  
WILDLAND-URBAN INTERFACE COMMUNITIES-AT-RISK  
MITIGATION PLAN REPORT**

**LOWER SNAKE RIVER DISTRICT  
MOUNTAIN HOME ASSESSMENT AREA**

**Prepared for:**

**U.S. Department of Interior  
Bureau of Land Management  
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## TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY .....	1
2.0	GOALS AND OBJECTIVES .....	2
3.0	BACKGROUND.....	2
4.0	EXISTING SITUATION .....	3
5.0	SUGGESTED ACTIONS AND DESIRED CONDITIONS.....	10
6.0	NEED FOR ACTION.....	10
7.0	METHODOLOGY .....	11
8.0	PROPOSED PROJECTS AND PRIORITY.....	13
8.1	Community Education and Outreach .....	14
8.2	Fuel Reduction .....	15
9.0	POTENTIAL SOURCES OF STATE FUNDING .....	17
10.0	BIBLIOGRAPHY .....	19

## FIGURES

Figure 1	Mountain Home Fuel Hazard Assessment Results (Topography)
Figure 2	Mountain Home Fuel Hazard Assessment Results (Fuels)
Figure 3	Mountain Home Structure Risk Assessment Results Based on 115 Sections with Private Land

## APPENDIX: MAPS

Map 1	Mountain Home Assessment Area
Map 2	Areas of Highest Risk for Fuels and Fire Suppression within the Mountain Home Assessment Area
Map 3	Proposed Mitigation Projects in the Mountain Home Assessment Area

## 1.0 EXECUTIVE SUMMARY

During the 2000 fire season more than 6.8 million acres of public and private lands were burned by wildfire, resulting in loss of property, damage to resources, and disruption of community services. Many of these fires occurred in wildland-urban interface areas and exceeded fire suppression capabilities. The President of the United States directed the Secretaries of the Departments of Agriculture and the Interior to increase federal investments in projects to reduce the risk of wildfire and associated losses in the wildland-urban interface. The Bureau of Land Management (BLM), Lower Snake River District is currently in the process of forming partnerships with local governments to plan fuels reduction treatments and other mitigation measures targeted at the wildland-urban interface in the vicinity of Federal lands. These partnerships are indicative of a shared responsibility to reduce wildland fire risks to communities.

The wildland-urban interface occurs where man-made structures meet or intermix with wildland vegetation. In certain situations, specific actions such as fuels reduction around communities, forest and rangeland restoration, infrastructure improvements, and public education and outreach may reduce the risk of catastrophic fire in the wildland-urban interface. To this end, the BLM implemented the Communities-at-Risk Wildland-Urban Interface Program. The program seeks to reduce the threat of wildland fires to communities through public outreach, the reduction or prevention of fuel build-up, and increasing the fire protection capabilities of communities.

Dynamac Corporation was contracted to support the BLM in their assessment of wildfire risk to the Mountain Home community and to identify specific actions that may reduce the risk. Dynamac scientists conducted fuel surveys by categorizing the vegetation, slope, and aspect of the land in the assessment area. The risk of wildland fire to homes, structures, and cultural resources on private land was also evaluated according to building materials, the presence of survivable space, road access, and the response time of the local fire department. Dynamac assessed the adequacy of the community's service infrastructure (including roads, water supplies, and fire fighting equipment) by systematic observation, and by interviewing community officials and fire prevention personnel. A community open house was held to disseminate information about the Communities-at-Risk, Wildland-Urban Interface Program to citizens, to afford them the opportunity to identify resources that are of value to the community, and to have them identify actions that may reduce the risk of wildland fire. The information gathered from the fuel surveys, structural surveys, interviews, infrastructure assessments, and community profile was integrated into two reports: a hazard assessment report and a mitigation report. Subsequent to

preparation and BLM review of the draft reports, a second community meeting was held in Mountain Home on October 30, 2001, to present to local officials and community members the results of the surveys and interviews, and to present and discuss Dynamac's proposed recommendations to BLM for mitigation activities that can be undertaken to reduce risk from wildland fires in the Mountain Home community. A summary of the second public meeting is included as Appendix B of this report.

The following action items were identified to reduce the hazard of wildfire in the Mountain Home assessment area, based on the synthesis of data in the Hazard Report, together with comments from BLM and discussion at the second public meeting:

- Expand and implement existing education and outreach program throughout the assessment area to encourage firewise practices, reducing risk to individual structures.
- Implement fuel reduction projects along highways to reduce fire frequency.

## **2.0 GOALS AND OBJECTIVES**

The goals of the Mountain Home wildfire hazard assessment and mitigation plans are to evaluate the hazards of wildland fire within the assessment area and then identify specific actions that could reduce the risks. The objectives are to (1) decrease the chances of wildfire spreading from BLM lands onto private lands, while correspondingly, (2) decreasing the risk of wildfire spreading from private lands onto BLM lands; and (3) to protect structures and other valued resources in the community from wildfire.

## **3.0 BACKGROUND**

Wildland fire is an integral component of many forest and rangeland ecosystems. In the conterminous United States before European settlement, an estimated 145 million acres were annually scorched by wildfire. In comparison, only about 14 million acres are currently burned annually due to increased agriculture, urbanization, habitat fragmentation, and fire suppression programs. The change from the historical fire regime to the present day has caused a shift in the composition and structure of native vegetation in fire-prone ecosystems such as some forests and rangelands, resulting in a dangerously high accumulation of fuels. As a result, when wildland fires do occur, they may burn hotter and grow larger than those in the past and pose an increased risk to human welfare and ecological integrity.

The risks of wildland fire are compounded by the increasing occurrence of human structures and activities in fire-prone ecosystems. The wildland-urban interface occurs where human structures meet or intermix with wildland vegetation. In certain situations, specific actions such as fuels reduction around communities, forest and rangeland restoration, infrastructure improvements, and public outreach may reduce the risk of losses to catastrophic fires in the wildland-urban interface. To this end, the BLM implemented the Communities-at Risk Wildland-Urban Interface Program. The program seeks to reduce the hazard of wildland fires to communities through public education and outreach, enlisting citizen participation, the reduction or prevention of fuel build-up, and increasing the fire protection capabilities of communities. The Mountain Home community was selected by the BLM to assess the threat of wildland fire and to identify specific actions that may reduce the risk of loss.

#### **4.0 EXISTING SITUATION**

Mountain Home is a medium-sized town (population 11,143 based on the 2000 census) located in Elmore County, Idaho, approximately 45 miles southeast of Boise. Mountain Home is the county seat of Elmore County; the local economy is supported by farming and ranching and by Mountain Home Air Force Base, which is located about 15 miles southwest of town. The population of Mountain Home grew by over 40 percent from 1990 to 2000, with new homes encroaching into grassland and sagebrush, mostly on the southern side of town. Land ownership in the assessment area is mixed, with 46 percent owned by BLM, 14 percent by the State of Idaho, and 39 percent privately owned. Much of the BLM and State land lies within the area designated as the Snake River Birds of Prey National Conservation Area, home to the largest breeding concentration of raptors in North America. The assessment area (**Map 1**) has a total area of 110,000 acres (172 square miles), and includes all or parts of T02S R06E, T02S R07E, T03S R05E, T03S R06E, T03S R07E, T03S R08E, T04S R05E, T04S R06E, T04S R07E, T04S R08E, and T05S R06E. In developing this report, Dynamac regarded the urban-wildland interface as including all private land in the assessment area and lying outside the town of Mountain Home. In some places, there are distinct edges between the town and adjacent wildland, but on the southern side of town where much of the community's growth is occurring, the boundary is unclear, with homes extending to previously uninhabited fields of annual grasses and sagebrush. Flammable fuels are present throughout the assessment area, and homes and ranch buildings are widely dispersed through the area.

The assessment area extends from the foothills of the Danskin Mountains in the northeast corner of the area to the Snake River plain along the southern boundary; elevation ranges from 3,000 to

4,200 feet. Boundaries of the assessment area are the same as boundaries of the Mountain Home rural fire protection district. The northern part of the assessment area includes several buttes and rolling foothills of the Danskin Mountains, while the southern part of the area is flat. Two creeks, Rattlesnake Creek and Canyon Creek, drain the area from north to south; both were dry during field sampling for this project in August 2001. Mountain Home Reservoir, formed by impoundment of Rattlesnake Creek, was also dry in August 2001.

Dominant vegetation in the assessment area includes annual grasses and forbs, with sagebrush, bitterbrush, and fourwing saltbush also present as sparse to dominant species in parts of the area. Grasses dominate much of the area, especially on hillsides with a southern exposure. Cheatgrass is the most common grass; medusahead, rye and other annual grasses are also common and bunchgrasses are present in much of the grassland, but the latter is seldom even a co-dominant, except in areas re-seeded following fire. Grasslands are heavily grazed in much of the area, and irrigated agriculture is present in areas south of Mountain Home, with crops including wheat, alfalfa, and sugar beets. Much of the irrigated land was left fallow during 2001. Cheatgrass and medusahead, along with sagebrush and locally abundant forbs, are dominant fuels in the assessment area. The widespread occurrence of cheatgrass reflects a history of disturbance, with native bunchgrasses displaced by a combination of persistent heavy grazing and/or frequent fire.

It is important to note that where there is a dominance of cheatgrass and medusahead in the assessment area, their overall hazard may be underestimated. While considered small, light fuels, these species are naturally more prone to burning than native plant species such as bunchgrasses and sagebrush. Although wildfires are sometimes rapidly suppressed in these species, their very dense, fine-textured nature increases both the chance of ignition and the rate of spread of wildfires. During years when the production of cheatgrass and medusahead is high, resistance to control is extreme and may be very dangerous to try and suppress wildfires of this fuel type. Native perennial grasses do not mature until late August and September whereas cheatgrass and medusahead mature in June. The dominance of these latter species changes the type of fires that occur and extends the fire season for nearly two months. The presence of continuous stands of flammable annual grasses in and around the community probably makes for a higher hazard than the fuel surveys might indicate.

Structures are the primary value at risk in the Mountain Home assessment area. Homes in the town of Mountain Home are generally at low risk to wildland fire, but several factors place homes in outlying parts of the assessment area at significant risk. The most significant factor is

that many homes are located in settings where they are surrounded by highly flammable fuels. This is compounded by the fact homes are widely dispersed in the area, making it impossible for the fire department to protect more than a handful of homes at any point in time. In addition, many homes are in close proximity to fuels (in about one third of sections, the average distance from structures to flammable fuels is less than 40 feet), and while a majority of homes in the area are surrounded by survivable space, many are not. More positively, most homes in the area are built of fire-resistant materials (roofing and/or siding), and road conditions and accessibility to homes is generally good. Response times by the Mountain Home Fire Department are short, averaging less than 20 minutes throughout the assessment area. Relative to conditions in other communities in southern Idaho that were evaluated in this study, conditions in the Mountain Home area reflect a relatively low risk to structures from wildland fire.

Rangeland is a second critical value at risk to fire in the assessment area. Rangeland is important as for livestock grazing (an important part of in the local economy); rangeland is also important as habitat for wildlife, including raptors in the Snake River Birds of Prey National Conservation Area. On fuel survey points characterized in August 2001, almost all survey sites had light fuels, usually cheatgrass and other annual species; wind-driven fires move and grow quickly in these fuels. The Mountain Home area has experienced many such fires in the past (e.g., most recently the Oregon Trail fire in 2000) and more fires can be expected in the future, although as fuel loads can be better managed to reduce flammability, fire frequency and extent can be expected to decline.

The Oregon Trail represents another value at risk from fire. The Trail passes through the northern edge of the assessment area, along an axis roughly southeast to northwest, parallel to and along the base of, the Danskin Mountains. The BLM Boise district manages trail resources in the area under an existing management plan, which addresses protection of cultural resources (specifically including the Oregon Trail) associated with wildfire suppression and reseeding projects. The plan directs that earth moving and reseeding equipment avoid Trail remnants and avoid the protective corridor as much as is feasible to avoid damaging Trail resources. This management approach is not without controversy; some local residents allege that protection of Trail resources adversely affected suppression of the 2000 Oregon Trail fire in the Mountain Home assessment area. Trail resources are not directly affected by the mitigation projects recommended in this report, but compliance with Section 106 of the National Historic Preservation Act may be required in planning for projects in this area.

The Mountain Home fire department has a mix of volunteer and professional staff; the Chief is a full-time professional, while the firefighters are volunteers. The volunteers are well-equipped and well-trained, with experience in fighting wildland fires. Equipment is generally up-to-date and in good condition, and no major deficiencies in equipment (trucks, tankers, personal protective equipment, communication equipment) were identified by the Fire Chief. The department has a very good working relationship with the BLM and with the County Sheriff's department. The department, particularly the Fire Chief, has also taken a proactive role in fire prevention through educational programs targeted at elementary school children, distribution of fliers to landowners about creating defensible space, and use of burning permits and burn bans. Elmore County also has nuisance ordinances that can be used to mandate cleanup of fuels and debris around homes, and enforces building codes through review of plans and multiple inspections during construction. The Fire Chief gives credit to these kinds of programs for a substantial reduction in fire calls during the past two years. The high quality of the Mountain Home Fire Department, and the proactive approach it takes to reducing fire risk, are invaluable assets to the community in the effort to minimize risk from wildfire.

The Hazard Report for the Mountain Home community presents and summarizes data for fuel and terrain conditions in the assessment area; those data can be summarized as follows:

- **Slope:** Slopes are generally low in the assessment area; ninety-three percent of the survey sites had slopes of 10 percent or less; five percent had slopes between 10 and 30 percent and only one percent of sites had slopes of more than 30 percent.
- **Aspect:** Forty-four percent of the sites had southern or western exposures, nineteen percent had northern exposure, and thirty-seven percent of had eastern exposure or were on flat land.
- **Elevation:** Seventy-nine percent of sites occurred at an elevation below 3,500 feet amsl; with the balance (twenty-one percent) of sites at an elevation between 3,500 and 5,500 feet.
- **Vegetation Type:** Seventy-one percent of survey points had vegetation types scored as "A" (low hazard), with the remaining twenty-nine percent scored as "B" (moderate hazard).
- **Fuel Type:** Ninety-seven percent of sites had fuels dominated by grasses or shrubs rated as "light fuels," with the balance (three percent) having sagebrush brush rated as medium fuel. The difference between classifications for vegetation type and fuel type values reflects the fact that some fuel points with sagebrush or bitterbrush were scored as light fuels (Class "A") for fuel type, but as sagebrush or bitterbrush (Class "B") for vegetation type.
- **Fuel Density:** Only seventeen percent of sites had fuel density rated as continuous (Class "C"). Forty-eight percent of sites were classified as broken moderate ("B") and thirty five percent of sites were rated as having discontinuous fuels (Class "A"). Fuels scored as broken

moderate occurred or discontinuous sometimes reflected outcrops of rock, but more typically occurred on sites with very heavy grazing or on sites that have experienced recent fire.

- **Fuel Bed Depth:** Reflecting the dominance of grasses in the survey area, most sites (sixty-nine percent) had average fuel depths less of one foot or less, and the balance (thirty-one percent) had average depths of one to three feet.

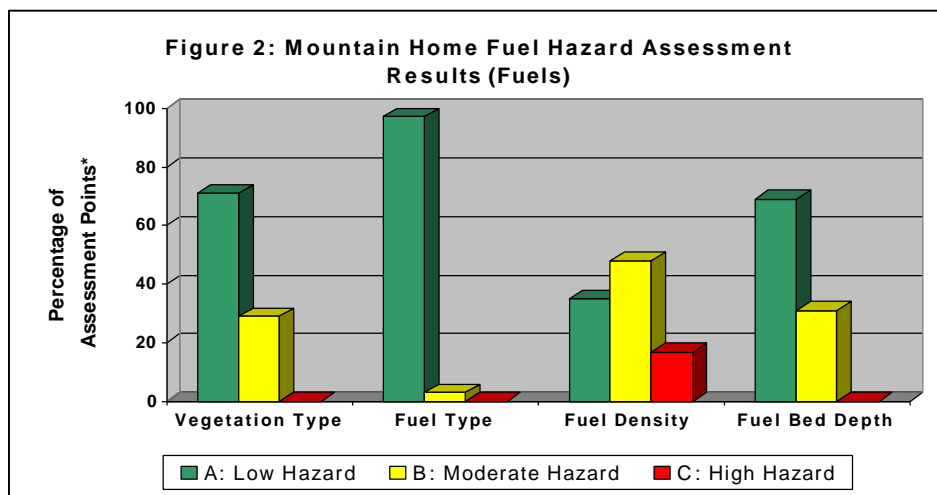
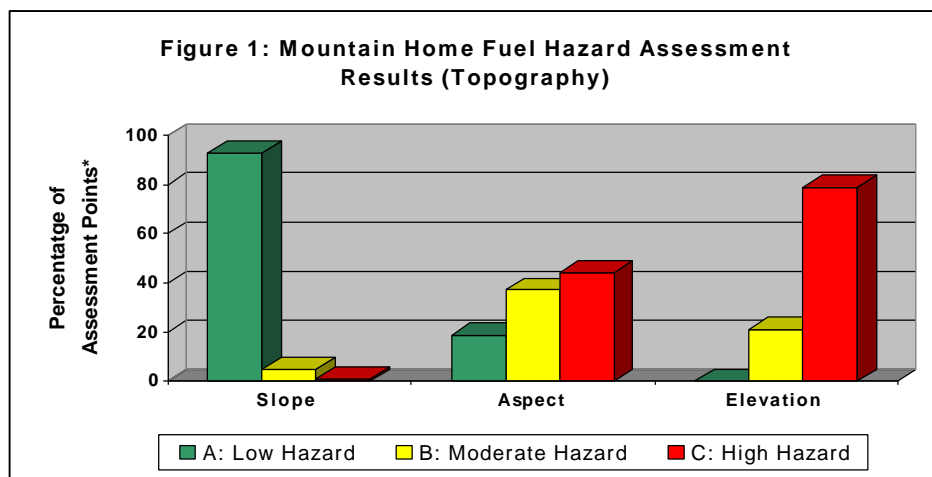
A second component of the Hazard Assessment was to characterize structures in the assessment area, for structure density, building materials, proximity to fuels, presence of a survivable space, and roads/accessibility. Results of the structure survey can be summarized as follows:

- **Structure Density:** Of 115 sections on the wildland-urban interface within the assessment area, 64 had one or more structures, and 51 had no structures. For the 115 sections on the interface, 17 percent (19 sections) had a structure density of more than one structure per 5 acres, 7 percent (8 sections) had a density of one structure per 5 to 10 acres, and the great majority (76 percent; 87 sections) had less than one structure per 10 acres. For sections with at least one structure, 30 percent had a density of more than one structure per five acres, while 58 percent had less than one structure per ten acres. Sections with high structure density all occur within or adjacent to the town of Mountain Home; sections with low structure density are widely distributed through the assessment area.
- **Proximity to Structures:** For the 64 sections with structures, 26 percent were classified as “C” because flammable wildland fuels were less than 40 feet from the structures; 38 percent were classified as “B,” having fuels 40 to 100 feet from structures, and 36 percent had fuels averaging more than 100 feet from structures. It should be noted that the above figures constitute only 56 percent of the *total* number of sections with private land. Of *all* sections with private land, 51 sections, or 44 percent did not have any structures; 19 percent were rated with an “A”, 8 percent were rated “B” and 39 percent rated “C”.
- **Predominant Building Materials:** For 61 sections having one or more dwellings, most (80 percent) had a majority of homes with fire-resistant roofing and/or siding (Score “A”). Most of the remaining sections (13 percent) had 10 to 50 percent of homes constructed with fire-resistant materials (Score “B”), and only 7 percent had fewer than ten percent of homes made with fire resistant materials. Of the 115 sections containing private land that were surveyed, 49 were rated “A” (43 percent,) 8 were rated “B” (7 percent,) and 4 were rated with a “C” (3 percent). Forty-seven percent of the sections did not contain residential dwellings.
- **Survivable Space:** For the 61 sections with one or more dwellings, a majority (61 percent) were classified as “A” because at least 50 percent of structures were surrounded by a

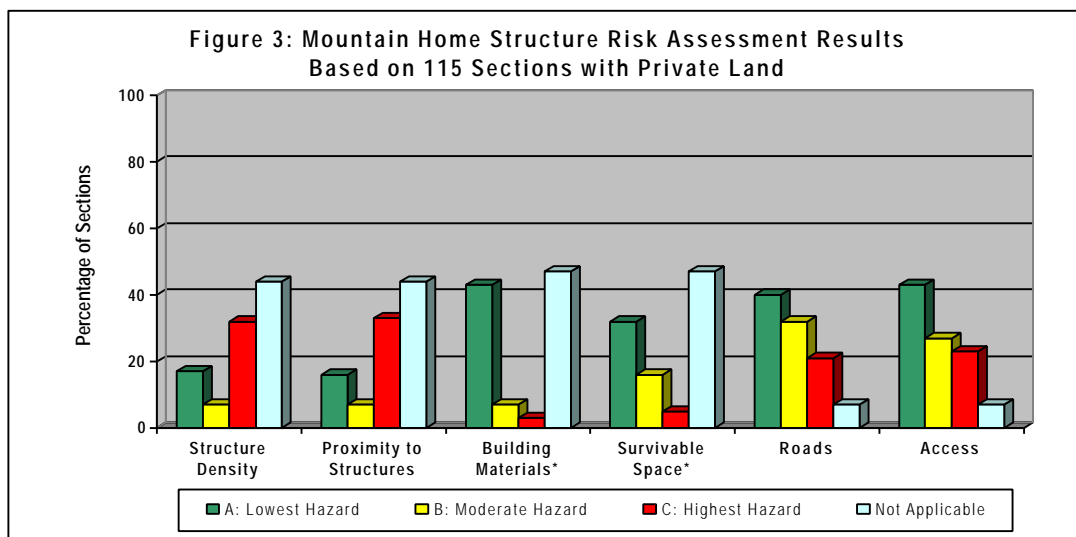
survivable space. In 30 percent of sections, 10-50 percent of homes had survivable space (Class “B”), and only 9 percent of sections had less than 10 percent of homes with survivable space. For many homes, survivable space appeared to be the result of heavy grazing in proximity to dwellings or the complete lack of any landscaping in proximity to homes, leaving large areas of bare ground.

- **Roads:** For the 64 sections with at least one structure, 53 percent had roads classified as “A” (wide, well-maintained), with 38 percent of sections classified as having maintained, but narrow two-lane roads with no shoulder (Class B), and only 11 percent of sections had roads classified as narrow or minimally maintained (Class C). For all sections with private land, comparable percentages were 40 percent rated as “A,” 32 percent as “B,” and 21 percent as “C;” 7 percent of sections with private land did not have any roads. Finally, for all 180 sections in the assessment area, 31 percent had roads rated as “A,” 26 percent as “B,” and 26 percent as “C;” 31 sections (17 percent) did not have any roads.
- **Response Time:** Based on discussions with the Mountain Home Fire Chief, response times for all sections in the assessment area are short: 20 minutes or less (Class A).
- **Access:** Access to the assessment area reflects the occurrence and quality of roads; for sections with at least one structure, 59 percent have good access (Class A), 27 percent have limited access (Class B), and only 15 percent of sections have poor access, with narrow and/or dead-end roads. For all sections with private land, corresponding access conditions were 43 percent classified as “A,” 27 percent as “B,” and 23 percent as “C;” 7 sections (6 percent) did not have any roads. Finally, for all sections in the assessment area, corresponding access conditions were 34 percent “A,” 21 percent “B,” and 28 percent “C;” 17 percent had no roads.

The data from the fuels hazard assessment are also graphically depicted in **Figures 1 and 2**. The charts depict the percentage of assessment points, based on a total of 75 points surveyed, that received a high, moderate, or low hazard ranking. The percentages of assessment points for hazards to structures are graphically depicted in **Figure 3**. It should be noted that for the categories of “Building Materials,” and “Survivable Space,” the percentages depicted in the chart are based on the 61 sections *with dwellings*, in contrast to the 64 sections with structures depicted for “Structure Density” and “Proximity to Structures” categories. It should also be noted that the chart below depicts data collected for the 115 sections surveyed on the wildland-urban interface; that is, sections containing or within one mile of BLM land.



\* These percentages are based on a total of 75 fuel points surveyed.



\* “Building Materials” and “Survivable Space” refer to sections containing residential dwellings, not every type of structure. For this reason, the category “Not Applicable” is slightly higher in percentage than those for “Structure Density” and “Proximity to Structures” which do not discriminate between structure types.

**Map 2** represents an overlay of data layers for: 1) the area(s) with highest risk in terms of fuel and 2) of high risk due to low structure density. It identifies one fuel point south of Mountain Home adjacent to sections with low (but not zero) structure density. The survey point identified on this map had large, dense sagebrush; while it had the highest relative risk for the Mountain Home assessment area, the point scored a “B” rating for all three elements of fuel characteristics (type, density, and depth), indicating that actual risk at the survey point is moderate, not particularly high. The map also shows that sections with low structure density to be scattered throughout private lands in the Mountain Home assessment area.

## **5.0 SUGGESTED ACTIONS AND DESIRED CONDITIONS**

Based on the interviews with community officials and the discussions during the public meeting, Dynamac ascertained that various citizens or officials in the community of Mountain Home would like to see the following condition or action occur in the assessment area:

- Increase knowledge and understanding of residents regarding proper firewise activities such as landscaping, use of fire resistant building materials, proper access roads, emergency evacuation procedures, and public land uses. Increase compliance with county building codes.
- Reduce fuel loads along highway and railroad rights-of-way, reducing the frequency of vehicle- and train-caused fires.
- Maintain close cooperation between BLM and local agencies on wildland fire issues.
- Reduce the buildup of flammable wildland fuels on rangeland in the areas surrounding the town of Mountain Home.
- Improve the natural vegetation cover and wildlife habitat on BLM land.

## **6.0 NEED FOR ACTION**

Wildfire is common in the Mountain Home assessment area and result from both natural and human causes. To reduce the risk of wildfire in the assessment area, both general and specific actions are needed. These actions will contribute to reduced wildfire hazards in two ways; first, by reducing vulnerability of individual structures to fire risk; and second, by reducing the frequency of fire in areas near heavily traveled highways.

General actions include activities that need to occur on a broad geographic scale and on an annual basis. These activities are targeted at reducing fuel loads in proximity to structures, and are most critical in outlying parts of the assessment area. Because homes are widely dispersed in

the assessment area, firefighters cannot protect more than a handful of structures at any one time when there are large or multiple fires in the area. The best approach for overall risk reduction in the community is to continue, and expand, programs that encourage and support individual homeowners in improving the space around their own homes (and other structures) to reduce the likelihood of range fire moving from adjacent fuels to their homes. Important components of these actions include creation and maintenance of survivable space around homes, and creation of firebreaks to increase the distance between structures and flammable fuels. BLM and local government will both play important roles in implementation of these activities, through community education programs, logistical support for disposal of yard debris and cleared brush, etc. Another long-term need for the community is to continue to refine and enforce county building codes that will reduce vulnerability to fire through mandated use of fire-resistant building materials, better roads, and water supplies for planned subdivisions, etc.

A second type of general action needed in the Mountain Home community is to reduce the amount of highly flammable fuels, especially in areas where ignition sources are present. This is necessary to reduce fire risk and should be done as part of a long-term overall strategy for improving the vegetation cover on rangeland in the area, both to reduce highly flammable fuels and to improve the quality of forage and of wildlife habitat. One approach that is already in use and that should be continued is the re-seeding of recently burned areas with perennial grasses. An alternative approach for fuel management that was suggested by several area residents is to increase grazing intensity. While this approach reduces fuel loads, it may not be consistent with broader goals of rangeland restoration or of promoting a long-term decrease in the amount of cheatgrass, medusahead, and other highly flammable fuels. Several community residents have also suggested placing firebreaks along major highways (and railroads). The goal of these firebreaks is to remove fuel and thereby prevent fires that might be caused by vehicles that pull off the road (e.g., due to contact between vegetation and hot catalytic converters), and also to slow or stop movement of fires after ignition.

## **7.0 METHODOLOGY**

The mitigation actions proposed herein for the Mountain Home assessment area are based on information acquired from fuel and structure surveys, public meetings, and interviews of community officials. The majority of information presented in this report was gathered during the time period of August 20 to 25, 2001.

The BLM assigned 78 fuel survey points in the Mountain Home assessment area to be evaluated by Dynamac (**Map 1**). The fuel survey points occurred in sections where BLM land occurred. Crews surveyed 75 of the 78 assigned points; at each survey point, digital photographs were taken of the surrounding area in the four cardinal directions. Also, a wildland fuels fire hazard assessment was completed which rated the characteristics of the land features and fuel sources. The rating elements included slope, aspect, elevation, fuel type, fuel density, and fuel bed depth, and were assigned to a risk category of low, medium, or high as defined by BLM. These data are presented and summarized in a Hazard Assessment Report prepared for the Mountain Home community by Dynamac; this document is available on request from the BLM, Lower Snake River District office.

Dynamac staff also collected information on the density, flammability and defensibility of structures on private land for 170 sections located within one mile of federal lands within the assessment area. The structural hazard assessment rated the structures within a one-square-mile section based on the resistance of building materials to fire, and the distance of flammable wildland fuels to structures. The rating elements included structure density, proximity of flammable fuels to the structures, building materials, survivable space, and types of roads, response times, and accessibility. Each element was assigned a rating of low, medium, or high hazard category defined by BLM; these data are also presented and summarized in the Hazard Assessment Report for the Mountain Home community.

A public meeting was convened on August 21, 2001, from 6 to 9 pm at the Fire Station in Mountain Home. Fire prevention specialists and BLM personnel publicized the meeting and invited the public to attend by distributing flyers by posting sandwich boards with the meeting information along main streets leading into town. Dynamac and BLM staff attended the public meeting to hand out firewise brochures, obtain information from the community on hazardous fire situations and desired conditions, and be an informational resource to those attending the meeting. In addition to the public meeting, a Dynamac Community Relations Specialist conducted interviews with numerous local public officials and residents. Individuals or groups interviewed included the Mountain Home Fire Chief, a city council member, the Elmore County Sheriff, the Elmore County Disaster Management Specialist, an Elmore County Commissioner, the Mayor, an official from the Planning and Zoning commission, and a Mountain Home Building and Zoning Code official. Information from these interviews is summarized in Appendix E of the Hazard Assessment Report.

A second public meeting was convened on October 30, 2001, at 7 pm, again, in the Mountain Home main Fire Station. The community was invited to attend through a direct mailing to all residents of the assessment area. Following an introduction by BLM, Dynamac presented a summary of the results of fuel and structure surveys for the assessment area and of the Mountain Home community profile. Based on this information, Dynamac then presented a summary of the desired conditions for the community and recommended mitigation projects to be undertaken by BLM and local cooperators. Following this presentation, there was a period for questions and answers and general discussion, followed by informal discussions between BLM, Dynamac, and members of the Mountain Home community. The second meeting provided input for adjustments to the final mitigation projects recommended to BLM.

## **8.0 PROPOSED PROJECTS AND PRIORITY**

The projects proposed are based on information obtained from the fuel and structure surveys, community meeting, and interviews. The following specific action items in order of priority were identified to reduce the hazard of wildfire in the Mountain Home assessment area:

- Expand and implement existing education and outreach program throughout the assessment area to encourage firewise practices, reducing risk to individual structures.
- Implement fuel reduction projects along highways and railroad rights-of-way to reduce fire frequency.

These projects are proposed because of the impact they would have on reducing the hazard of wildland fire in the Mountain Home assessment area. The fuel surveys and structure surveys demonstrated the widespread occurrence of annual grasses (e.g., cheatgrass), sagebrush and forbs, all highly flammable fuels, throughout the assessment area. It was also noted that despite ongoing efforts to promote firewise practices, many residences in rural parts of the assessment area still have flammable wildland fuels in close proximity to homes and other structures, and that many homes are not within a survivable space. Because of the highly dispersed nature of structures in most of the assessment area, reduction of fuels in the immediate vicinity of homes and other structures is viewed as the most efficient and effective method of reducing fire risk to structures. To ensure the success of this approach, the ongoing fire safety program managed by Fire Department will be supplemented by a community education/outreach effort that will remind homeowners of the importance of their individual efforts, will train and encourage homeowners to implement effective firewise approaches, and will provide logistical support for removal of debris. In the long run, effective public education and outreach program will likely

prove to be the most effective approach to reducing wildland fire in the Mountain Home assessment area.

A second priority for Mountain Home is a project designed to reduce the disproportionately high incidence of fire along major highways, especially Interstate 84 (I-84). BLM data show a very high incidence of fire in a narrow corridor along I-84 and the Union Pacific railroad; many of these fires are caused by accidental ignition by vehicles pulled off the road, resulting from contact of fuels with catalytic converters. By aggressively mowing to reduce fuel height and loads in a strip along either side of heavily traveled highways, this project should reduce fire frequency in a significant portion of the assessment area. The county highway districts, BLM, and private landowners would share responsibility for implementation of this project.

In addition, while not proposed as a mitigation project, it is also suggested that BLM and the Mountain Home Fire Department consider exercising a cooperative agreement to share fire equipment. If an agreement is reached, it would likely result in BLM's providing equipment to the Mountain Home Fire Department, to be operated and used by the department to improve fire suppression capabilities in rural areas around Mountain Home.

## **8.1 Community Education and Outreach**

**Purpose of Public Education and Outreach:** The purpose of the community-wide education program is to 1) educate the public of the dangers of wildfire in the area, 2) urge residents to take responsibility in reducing the risk of wildfire and to create defensible space around their residence, and 3) increase awareness of the natural role of fire in rangeland ecosystems and the benefits of prescribed burning or occasionally managing natural wildland fires to achieve ecological benefits, while maintaining firefighter and public safety as the top priority.

The public education and outreach program will be co-sponsored by the BLM and the Mountain Home Fire Department through a partnership agreement. This program is intended to complement ongoing programs already developed and implemented by the Fire Department. It may be desirable to include Elmore County as a third partner in planning and implementing outreach programs. This would increase the breadth of the program, and would allow it to extend beyond Mountain Home into nearby areas where such programs have been lacking (e.g., the Tipanuk area).

**Outreach Occurrence:** An annual “Firewise Clean-Up Day” is one tool that is recommended to encourage residents to create defensible/survivable space around their residence. In conjunction with the Firewise Clean-Up Day, specific demonstration projects may be designed and utilized to educate residents about longer-term investments they could make to increase fire safety. The clean-up day would occur in conjunction with public demonstrations, education programs, and speakers on wildfire and firewise practices.

**Outreach Timing:** The annual “Firewise Clean-Up Day” education program and public demonstrations would be most effective in the spring to remind people to prepare their properties for the coming fire season.

**Outreach Necessity:** Citizen involvement in wildfire mitigation in and around communities is a necessary element for success. Public education and outreach is an effective means of engaging the public in the process of reducing risks to a community. Such education and outreach has been shown to motivate homeowners to take measures around their individual property, thereby contributing to the reduction of wildfire hazards in a community. Further, a community education and outreach program will help identify problems and solutions for both federal and private landowners, and offer opportunities for partnerships and agreements. Implementation of the program, and appropriate action by homeowners, will reduce fire risk to several hundred structures in the Mountain Home assessment area.

## **8.2 Fuel Reduction**

**Construction of Firebreaks and Fuels Reduction:** The BLM and the State and County Highway Departments, and the Union Pacific Railroad, through partnerships, should develop a mowing or other appropriate fuels treatment program to reduce fuel height along rights-of-way for all major highways and railroads. Mowing would be designed to cut grasses along roads and railroad tracks for a width of approximately 25 feet, to the lowest practical height, with mowing scheduled for late spring or early summer, after the primary growing season has finished. If wet weather conditions result in significant growth of grasses after mowing, treatment should be repeated in later in the summer to insure that grass heights are sufficiently low that they will not come into contact with exhaust systems of vehicles pulled off the roadway. Highway and railroad areas included in the mowing program are identified on **Map 3**.

**Type of Fuel Treatment:** Mechanical treatment (i.e., mowing) should be used to reduce the height of grasses and weedy species growing along highways. Two to three weeks after

mowing, fuel heights should be spot-checked to determine if there has been significant re-growth of grasses. If so, mowing should be repeated. The total linear length of treatment would be approximately 75 miles, and the treatment area would be approximately 500 acres. If mowing is deemed unfeasible, other appropriate treatments should be sought, such as planting fire-resistant species. If mowing occurs, care must be taken to prevent fires during the implementation, as mowing equipment has been known to start fires. As a long-term approach, BLM and highway departments should also consider planting bunchgrasses or other fire-resistant vegetation

**Locations of Firebreaks and Fuel Treatments:** Map 2 shows the locations of roads and railroads for which mowing is proposed. The highest priority for mowing is I-84 for its entire length within the assessment area; other roads to be treated include US highway 20, Idaho Routes 51 and 67 (Air Base Road), Old Highway 26, and Bennett Road between Old Highway 26 and I-84. Railroad rights-of-way recommended for treatment include the Union Pacific line roughly parallel to Interstate 84, and its spur, extending to Mountain Home Air Force Base. The BLM and the appropriate state or county highway department will each be responsible for the implementation of the mowing program on their rights-of-way.

**Project Timing:** BLM generally times projects in the following manner: Year One is the year identification and justification of projects occurs, and treatment objectives are determined. Field surveys begin. In Year Two projects that require compliance with the National Environmental Policy Act (NEPA) are planned, analyzed, and designed. Projects that do not require NEPA compliance begin implementation. In Year Three, NEPA projects begin implementation. All steps are contingent on available funding. In Year Four, post-treatment monitoring begins.

Mowing should be initiated in late spring or early summer, 2002, and repeated if significant re-growth of grasses occurs after mowing. This schedule should be repeated on an annual basis.

**Project Necessity:** Fuel treatment by mowing should be effective in reducing the occurrence of fire in areas close to highways and railroads, where accidental ignition from vehicles is an important cause of fire. In addition, the combination of roads and mowed highway margins will also act as a firebreak, slowing or stopping the progress of wind-driven fires. This treatment will protect structures and rangeland by reducing fire frequency, and by contributing to better fire suppression.

## 9.0 POTENTIAL SOURCES OF STATE FUNDING

Idaho Department of Lands representative Kurt Houston, who is based out of IDL's Boise office, provided the following information. Communities-at-Risk may benefit from these State-administered grant programs, which provide financial assistance for various types of fire safety-, fire suppression- and fire education-related projects, as well as stewardship activities.

**Idaho Fire Assistance Program:** A cost-share program designed to assist fire service organizations with organizing, training, and purchasing equipment for fire protection and suppression. Open application period is from May 1 through June 15 each year. Contact Fire Warden Kurt Houston at the Idaho Department of Lands office in Boise at (208) 334-3488 for more information and applications.

**Volunteer Fire Assistance Program:** A cost-share program with federal funds administered by the State of Idaho. The rural community must have a population of less than 10,000. Only those projects to organize, train, and equip fire service organizations qualify for financial assistance. Open application period is from October 1 through December 31 each year. Contact Fire Warden Kurt Houston at the Idaho Department of Lands office in Boise at (208) 334-3488 for more information and applications.

**Federal Excess Personal Property Program:** An equipment loaning program for fire service organizations with populations less than 10,000 residents. Usable fire related equipment is loaned to the organization until such time the organization no longer wants it. Titles for vehicles remain with the federal government. Applications are continuously accepted. Contact Fire Warden Kurt Houston at the Idaho Department of Lands office in Boise at (208) 334-3488 for more information and applications.

**Forest Incentive Program:** Federal cost-share funds administered by the Natural Resources Conservation Service (NRCS). The Forestry Incentives Program (FIP) supports good forest management practices on privately owned, non-industrial forest lands nationwide. FIP is designed to benefit the environment while meeting future demands for wood products. Eligible practices are tree planting, timber stand improvement, site preparation for natural regeneration, and other related activities. FIP is available in counties designated by a Forest Service survey of eligible private timber acreage. Depending on funding, the open application period varies. Contact the nearest NRCS or Tim Kennedy at the Boise IDL for more information and

applications. Additional information on the program and NCRS contacts is available at <http://id.nrcs.usda.gov/programs.htm>.

**Stewardship Incentive Program:** Federal cost-share funds administered by the NRCS. The Stewardship Incentive Program provides technical and financial assistance to encourage non-industrial private forest landowners to keep their lands and natural resources productive and healthy. Qualifying land includes rural lands with existing tree cover or land suitable for growing trees and which is owned by a private individual, group, association, corporation, Indian tribe, or other legal private entity. Eligible landowners must have an approved Forest Stewardship Plan and own 1,000 or fewer acres of qualifying land. Authorizations may be obtained for exceptions of up to 5,000 acres. Depending on funding, the open application period varies. Contact the nearest NRCS or Tim Kennedy at the Boise IDL for more information and applications. Additional information on the program and NCRS contacts is available at <http://id.nrcs.usda.gov/programs.htm>.

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## APPENDIX: Maps